

# City of Biggs Solar Program Guidebook

The City of Biggs ("City") offers incentives to encourage the installation of high-quality solar photovoltaic ("PV") systems. California's Senate Bill 1 ("SB1"), passed in August 2006, set a statewide goal to add 3,000 MW of new PV systems over ten years. The outcome of the program is examined at the end of each year and appropriate revisions are made to ensure progress toward program goals and equity among rate classes.

Per SB1 requirements, a solar PV rebate budget will be made available through 2017. The City's SB1 Program is funded by electric utility customer revenue. In accordance with Assembly Bill 1890 publicly-owned utilities are required to collect a separate surcharge to be used for "public benefits" (PB) programs. The expenditure of those funds is entirely the discretion of locally elected governing bodies so long as the expenditures fit within a category included in AB 1890. The City's SB1 Program is eligible for use of Public Benefits Funds (PBF).

### PROGRAM ELIGIBILITY AND REQUIREMENTS

## **Customer/Applicant**

The City's Solar Program is available to all City electric utility customers. The applicant must be the electric utility customer of record at the location where the generating system will be located. Solar retailers/installers may provide application assistance. To be eligible for a rebate, the system must be owned by the customer and installed on the customer's side of the meter. **Leased systems do not qualify for the City rebates.** 

To be eligible for a rebate, the customer must submit a Rebate Application and receive a Rebate Reservation Confirmation letter from the City prior to the beginning of installation and final interconnection authorization. If a rebate reservation expires, the funds will be returned to the PBF and the customer must re-apply in order to reserve solar rebate funds

The City cannot provide contractor recommendations, but recommends customers obtain more than one contractor bid and request references. Customers may search for solar installers, contractors and retailers at: http://www.gosolarcalifornia.ca.gov/retailers/search-new.php

Larger, non-residential customers may be able to qualify for larger rebates, depending upon the size of their load and the size of the PV equipment that is installed. These customers will be handled on case-by-case basis.

# <u>Installer</u>

To be eligible for a rebate, all systems must be installed by appropriately licensed contractors in accordance with rules and regulations adopted by the State of California Contractors State Licensing Board ("CSLB") and City Building Codes. Contractors must have an active A, B, C-10 license, or C-46 license for installing PV systems. Roofing contractors with a current C-39 license may place PV panels in accordance with the limitations of their license; however, electrical connections shall not be made by a roofing contractor. Although not required, installation contractors are encouraged to become certified by the North American Board of Certified Energy Practitioners ("NABCEP"). The City also recommends that the installer be registered with Go Solar California and meet their pre-screening criteria. For more information, visit: www.gosolarcalifornia.ca.gov/installers.

In all cases, systems must be installed in conformance with the manufacturer's specifications, all applicable electrical and building codes and standards and City Electric Utility standards and specifications.

## **System Equipment**

All PV modules, inverters, and meters must be listed on the California Energy Commission's ("CEC") Eligible Equipment List and must be new and not been previously placed in service in any other location or for any other application. This list is continuously updated by the CEC. The current list for eligible equipment can be found at: <a href="https://www.gosolarcalifornia.ca.gov/equipment">www.gosolarcalifornia.ca.gov/equipment</a>.

*Modules*: Only PV modules listed at <a href="www.gosolarcalifornia.ca.gov/equipment/pvmodule">www.gosolarcalifornia.ca.gov/equipment/pvmodule</a> may be considered eligible for rebates. All modules must be certified to UL 1703 by a Nationally Recognized Testing Laboratory ("NRTL") to ensure safety and reliability.

*Inverters*: Only inverters listed at <a href="www.gosolarcalifornia.ca.gov/equipment/inverter">www.gosolarcalifornia.ca.gov/equipment/inverter</a> may be considered eligible for rebates. All inverters shall be certified to UL 1741 standards by a NRTL. Inverters shall also meet IEEE 1547 interconnection standards to be approved as non-islanding (non-backfeeding) devices that automatically disconnect from the grid upon loss of utility voltage.

*Performance Meters*: All solar energy systems must be installed with a performance meter so that the customer can monitor and measure the system's performance and the quantity of electricity generated by the system. All meters shall measure and display cumulative energy produced and retain this data during power outages. All performance meters shall be easy to read and accessible to meter readers.

Ground-mounted systems: If system is not roof mounted, the system must meet National Electric Safety Code ("NESC") clearances and all property easements must be disclosed. Rebate applications must include a plot plan denoting system location in relation to existing electrical service and existing easements. Additionally, if trenching is required, installers are required to call for an Underground Service Alert ("USA") to locate underground utilities. If you don't "Call Before You Dig," you may disrupt service to an entire neighborhood, harm you and those around you and potentially result in fines and repair costs. Calling USA is free and helps prevent undesired consequences.

*All systems*: AC disconnect between inverter AC output and connection to utility is to be a visible blade, lockable type disconnect listed for its use.

The City will, directly or through its agent, inspect the system installation prior to final approval and reserves the right to reject a system from interconnection if it is deemed unsafe by the City.

# **System Size**

The minimum system size requirement for the City's SB1 Program rebate is 1 kW and maximum system size is 10 kW. Residential and commercial systems are limited to 3kW. Industrial systems may be up to 10kW.

To be eligible, the system must be sized so that the amount of electricity produced by the system primarily offsets part -- up to all -- of the customer's annual electrical needs at the site of installation. Systems sized between 1 kW $_{AC}$  and 3 kW $_{AC}$ , inclusive, shall be assumed to primarily offset the customer's annual electricity needs. For systems larger than 3 kW $_{AC}$ , the customer must show justification of the system sizing with the submittal of the initial application, demonstrating that the system is sized NOT to exceed the annual electric energy use.

For new construction or for customers with existing electric usage history that does not reflect the customer's expected expanded consumption, the customer must include an electrical load estimate for systems larger than 3 kW $_{AC}$ . Suggested methods of substantiating a load estimate include an electric load calculation with corresponding equipment schedules, building simulation program reports, or detailed engineering calculations. The Electric Utility Department may verify load calculations.

#### **Shading Analysis**

A shading analysis is required and must be attached to all applications. A system is considered to have "minimal shading" if no solar obstruction is closer than a distance twice the height it extends above the PV modules. Obstructions include any roof equipment, neighboring trees, poles, buildings, or other objects. Landscaping should be evaluated at the expected mature height. For shading from existing obstructions, shading conditions shall be verified using a solar assessment tool, such as a Solar Pathfinder or Solmetric report. Monthly shading derate factors must be recorded for the system (100% = no shading, 0% = total shading).

## **Energy Efficiency**

For residential sites, the customer must include the Residential Energy Efficiency Checklist along with the application. It is recommended that the customer implement efficiency measures prior to PV system installation. Customers may be exempt if their home complies with the 2001 or 2005 CA Title 24 Energy Code, (submit a copy showing compliance with CF-1R Form, prepared by a Certified Energy Plans Examiner). For commercial sites, the customer should consider contracting for an energy efficiency study prior to PV system installation.

## **Warranty**

All systems must have a minimum 10-year warranty provided in combination by the manufacturer and installer to protect the purchaser against defective workmanship, system or component breakdown, or degradation in electrical output of more than fifteen percent from their originally rated electrical output during the 10-year period. The warranty must cover the PV modules and inverters, and provide for nocost repair or replacement of the system or system components, including any associated labor during the warranty period.

## **Performance and Permanency**

Equipment is intended to be in place for the duration of its useful life. Only permanently installed systems are eligible for rebates. PV systems must demonstrate adequate assurances of both physical and contractual permanence prior to receiving a rebate.

# **Metering and Data Collection**

The City shall install, own, and maintain a kilowatt-hour meter capable of registering the bi-directional flow of electricity. The customer is responsible for current application, permit and inspection fees. Modifications to the service entrance must be approved by the City. All service entrance and disconnects must be Electric Utility Service Equipment Requirements Committee ("EUSERC") approved. The customer must install a separate performance meter on the customer-side of the system (see "System Equipment" above). Additionally, the customer will be required to make available cumulative production data from their performance meter on an annual basis.

## **Site Inspections and System Verification**

To be eligible for the City's rebate, customers must agree to provide the City, and/or third parties contracted by the City, access to the site and any available data and information collected on the system.

The City will conduct a system interconnection inspection in order to verify that the PV system is installed as represented in the application, is operational, interconnected and conforms to the eligibility criteria of the City's SB1 Program and the Interconnection Agreement. At the City's discretion, the installer may be required to be present at the interconnection inspection. The City reserves the right to disqualify installers from future program participation for failed inspections due to gross negligence, fraud, or uncorrected mechanical failures within 60 days.

#### CITY SB1 PROGRAM REBATE STRUCTURE AND APPLICATION PROCESS

Complete instructions, including a list of required attachments, are available in the City's SB1 Program Rebate Application. Applications will be received and approved on a first-come, first served basis until the available funding has been allocated. If available funds become fully allocated, additional funds will become available on July 1 of the following fiscal year. In addition, City Council may, at their discretion, allocate additional funds if they are available. If the available rebate funds are not fully reserved in any given fiscal year, the remaining rebates may be used for other approved Public Benefits program purposes.

Projects must be complete within 6 months from the date of the customer's Rebate Reservation Confirmation letter. Unfinished projects will either have to file for an extension or reapply at the start of the next fiscal year. Applicable caps based on rate class still apply.

## **Calculating Rebate Amount**

Beginning in 2010, all rebates for systems up to 3kW will be calculated according to the expected performance of the system, called an Expected Performance Based Incentive ("EPBB"). Rebates for systems >3kW and up to 10kW (industrial customers only) will be custom designed, performance based, and approved by the City Council on a case-by-case basis. Rebate rates will be based on the year in which the application is received. Please see Rebate Application Instructions for more information on calculating rebate amounts.

## **Project Costs**

No project can receive total combined incentives that exceed total eligible project costs. The customer must submit project cost details to report total eligible project costs and to ensure that total incentives do not exceed out-of-pocket expenses for the customer.

## **Application Process**

The customer submits the SB 1 Application, with required attachments. If the application is incomplete, the City will return the Application. If the Application is complete and rebate funds are available, the City will provide a Rebate Reservation Confirmation Letter to the customer. Once the system is complete, the customer must schedule a System Interconnection Inspection with the City so that the system can be interconnected and energized. All Building Permit processes must be adhered to. The customer must pay all current application, permit and inspection fees prior to installing the PV system. The PV System must pass all required City Building inspections prior to the Interconnection Inspection. Once the system has passed all required inspections and required paperwork has been submitted, the City will initiate the rebate payment process. The reservation period for all projects is 6 months from the date of confirmation, unless an extension is filed.

## **Rebate Payments**

Rebate Payments will be made to the customer or other party, as designated in the Rebate Application. The City shall process the rebate and send a check to the designated party within 30 days of receipt of project completion and approval. Rebates cannot be paid retroactively for systems installed in previous years. Each customer is eligible for one rebate for each property owned, on a first-come, first-served basis. Rebate recipients are responsible for determining if their rebate is taxable by checking with a qualified tax advisor.

In exchange for the SB1 Program rebate and annual payments to net-producers of energy, the customer agrees that the Renewable Energy Credits ("RECs") generated by the system belong to The City. The City may use or sell the RECs at their discretion.

## **System Changes Affecting Rebate Amount**

Customers must inform the City of any system design changes by submitting written notification. If the revised system is larger, the incremental rebate will be calculated and the rebate amount will be revised, if funding is still available.

#### PERMITS AND INTERCONNECTION

A final approved building permit, from Butte County, is required to qualify for a SB1 Program rebate. Customers will also be required to enter into an Interconnection/Net Metering Agreement with the City.

THE CITY OF BIGGS RESERVES THE RIGHT TO MODIFY THIS PROGRAM, AS NEEDED, TO BETTER SERVE THE INTERESTS OF OUR CUSTOMERS.

For more information, please contact: City of Biggs (530) 868-5493 Efficiency Services 1-888-883-9879